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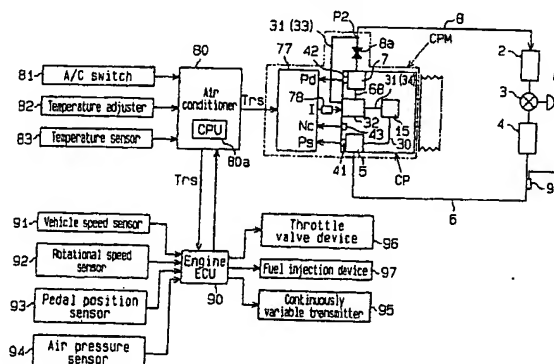
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(54) Displacement control apparatus for variable displacement compressor, displacement control method and compressor module

(57) A displacement control apparatus controls the displacement of a variable displacement compressor (CP). A drive shaft (16) of the compressor (CP) is driven by an engine (25). Torque ( $Tr$ ) acting on the drive shaft (16) represents the displacement. The apparatus includes a control valve (32), an air conditioner controller (80) and a compressor controller (77). The control valve (32) changes the compressor displacement. The air conditioner controller (80) produces a torque setting signal,

which represents a target torque ( $Tr_{set}$ ), to the compressor controller (77). The compressor controller (77) changes the valve opening based on the torque setting signal such that the actual load torque ( $Tr$ ) matches the target torque value ( $Tr_{set}$ ). Accordingly, the compressor (CP) is controlled according to the torque. The air conditioner controller (80) may send the torque setting signal to an engine controller (90), which eliminates the need for load torque maps.

Fig.1





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## EUROPEAN SEARCH REPORT

Application Number  
EP 01 10 4795

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The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>20 February 2002</b>	Examiner <b>Hillebrand, S</b>
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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